UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

FEB 17 2009

MEMORANDUM

SUBJECT: Classic Emergency Removal Action at the Diaz Intermediates Corporation Site
West Memphis, Crittenden County, Arkansas

FROM: Charles W. Fisher, (OSC/RPM) Charles W. Fisher
On-Scene Coordinator/Remedial Project Manager
Remedial Branch, Arkansas/Texas Team (6SF-RA)

THRU: Ragan Broyles, Associate Director
Prevention and Response Branch (6SF-P)

TO: File

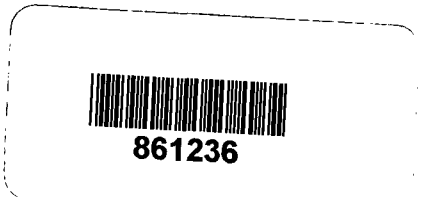
I. PURPOSE

This memorandum documents the On-Scene Coordinator's (OSC's) approval for a Classic Emergency Removal Action Pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. Section 9601 et seq., at the Diaz Intermediates Corporation Site (the Site), located at 301 Wyanoke Road, City of West Memphis, Crittenden County, Arkansas. During the middle of February 2008, OSC Fisher was voluntarily reassigned to a vacant Superfund Division Remedial Project Manager (RPM) position. Superfund Division management requested RPM Fisher to continue working on the Site because of his Site knowledge and expertise. The emergency removal action was conducted to stabilize the bankrupt and abandoned Site containing approximately 2,600 deteriorating containers and to pump down the free standing water found at the Site.

This action meets the criteria for initiating a removal action under the National Contingency Plan (NCP), 40 CFR Section 300.415(b) (2). This action is expected to require less than twelve months and two million dollars to complete.

II. SITE CONDITION AND BACKGROUND

CERCLIS ID Number:	ARR000005843
Category of Removal:	Classic Emergency
Site ID Number:	A6C4
Latitude:	34.518083 North
Longitude:	90.648433 West



A. Site Description

1. Removal Site Evaluation

The Diaz Intermediates Corporation facility (the Site) is a bankrupt, inactive and abandoned supplier of high purity halogenated fine organics to the chemical industry located at 301Wyanoke Road, City of West Memphis, Crittenden County, Arkansas. The Site used bromine as the primary raw material in the production of its products, which are intermediates to the chemical industry. By the letter dated September 12, 2007, the State of Arkansas Department of Environmental Quality (ADEQ) referred the Site to the Environmental Protection Agency (EPA) Region 6 Superfund Division and requested an initiation of a response action by the EPA (*see* Attachment 1).

On October 23, 2007, EPA On-Scene Coordinator (OSC) Charles Fisher, the EPA Superfund Technical Assessment and Response Team Contractor (START) representatives and an ADEQ representative visited the Site to start a Superfund Removal Assessment. During the initial Site assessment EPA found the Site fenced and secure, but it did have a strong chemical odor around some of the drums located within the receiving warehouse and outside. The site assessment also revealed that there are approximately 2,600 containers of varying sizes (from 5 gallon pals to 550 gallon plastic totes), 8 above ground storage tanks, and 7 railroad tank cars of which a majority of them have contents. According to the labels found on the containers, the contents varied from finished products, to off-specification/intermediate products and raw materials. The EPA completed its initial Site assessment on October 31, 2007, and demobilized from the Site.

2. Physical Location

The Site is located at 301Wyanoke Road, City of West Memphis, Crittenden County, Arkansas. Located adjacent to and within a quarter mile of the Site are three active businesses.

3. Site Characteristics

The Site was built in about 1998 and sits on 10 acres of land consisting of a 5,700 square foot (SF) processing plant, a 1,380 SF tank farm area, an outside drum storage area, offices, labs and a warehouse area. The Site was shut down at the end of July 2007, and on August 15, 2007, Diaz Intermediates filed for Chapter 7 bankruptcy in the Eastern District of Arkansas. On August 15, 2007, James C. Luker was appointed the U.S. Bankruptcy Trustee for the Diaz case and on October 23, 2007, the Trustee's request for abandonment was granted by the court.

From 23 through October 31, 2008, the EPA and EPA START contractor conducted removal assessment activities at the Site that included performing air monitoring, a radiation survey, container inventorying and the sampling of 42 representative drums for field hazard categorization (haz-cat). Haz-cat results indicated that one (1) drum exhibited the Resource

Conservation and Recovery Act (RCRA) characteristic for corrosive (D002) with a pH greater than or equal to 12.0, twelve (12) drums exhibited the RCRA characteristic for corrosive (D002) with a pH lower than or equal to 2.0, and twenty four (24) drums exhibited the RCRA characteristic for ignitability (D001) with flash points of less than 140 degrees Fahrenheit.

Based upon the Site inspection, completion of an EPA Site Assessment and a review of several ADEQ Site inspection reports, EPA Region 6 determined that most of the above ground storage tanks; plastic drums, plastic totes and smaller containers contain hazardous substances, pollutants and/or contaminants. As part of the EPA Site Assessment, the following chemical names were obtained from labels of containers that had materials in them; Bromine, Bromochlorobenzene, Dibromobenzene, Flurobenzene, Bromoflurobenzene, Bromotoluene, Benzene, Bromobenzene, Dibromotoluene, Propylbromide, Dibromofluorobenzene, Amylbromide, Bromoanisole, and Hydrobromic Acid.

4. Release or threatened release into the environment of a hazardous substance, pollutant or contaminant

A release or the threat of a release of a hazardous substance into the environment exists at the Site. As previously noted, the Site contains approximately 2,600 containers of varying sizes (from 5 gallon pals to 550 gallon plastic totes), 8 above ground storage tanks, and 7 railroad tank cars of which a majority of them have contents. Many of the containers have poor integrity, or are not sealed, or are damaged and are steadily deteriorating. The presence of a strong bromine odor further substantiates the fact that the drums are in poor condition and/or are not properly sealed. Drums are improperly stored and may release their entire contents into the environment if a response action had not been initiated and does not continue into the future. Furthermore, subsequent mixing of potential incompatible chemicals may result in a fire and/or explosion at the Site. Since the EPA and its two contractors first mobilized to the Site, to perform stabilization activities, on January 8, 2008, and during subsequent stabilization activities approximately 57 poor condition drum contents have been transferred to better condition on-site plastic totes, approximately 29 poor condition drums have been over packed and approximately 200 poor condition plastic drum bungs have been replaced with new plastic drum bungs.

5. NPL Status

The Site is not presently on the National Priorities List (NPL), and has not received a Hazard Ranking System rating.

6. Maps, Pictures and other graphic representations.

Attachment #2. Site Area Map
Attachment #3. Site Plan

B. Other Actions to Date

1. Previous Actions

By the letter dated September 12, 2007, ADEQ referred the Site to the EPA Region 6 Superfund Division and requested an initiation of a response action by the EPA. From October 23 through 31, 2008, the EPA and EPA START contractor conducted removal assessment activities at the Site that included performing air monitoring, a radiation survey, hazard categorization of drum contents and container inventorying.

On January 8, 2008, OSC Fisher and the two EPA contractors mobilized to the Site to initiate an emergency response removal stabilization action. The initial phase consisted of stabilizing the Site by inspecting and securing all containers, transferring any leaking and/or deteriorated containers into better condition containers, and sampling of pooled storm water for fixed off site laboratory analysis.

On January 10 and 11, 2008, approximately 550 gallons from the 23 dibromobenzene drums, that included several that were leaking, was transferred into three on site 300 gallon plastic tote tanks for storage. The three tote tanks were properly labeled and secured in the covered warehouse area. Thirteen of the 23 dibromobenzene drums had a portion of their contents that was not pump able due to it consisting of a think sludge. Therefore, the 13 drums were placed and secured in 13 poly over-pack drums. The remaining 10 drums were placed on pallets and a secondary containment berm was constructed to prevent contact with rain water that would enter the warehouse. On January 10, 2008, 6 storm water samples were collected and shipped to a fixed off-site laboratory for industrial wastewater permit discharge parameters. The Site was secured and personnel demobilized from the Site on January 11, 2008.

Storm water analytical results from the 6 samples were received and forwarded to both ADEQ and the City of West Memphis Environmental Director. ADEQ approved the discharge of storm water from 5 of the 6 locations, except from the Old Tank Farm secondary containment area. The analytical results for the Old Tank Farm secondary containment revealed that this area had a low pH value of 4.25 and a high zinc concentration of 21.5 ppm that exceed the industrial wastewater permit discharge parameters.

From January 29 through 30, 2008, the EPA and its two contractors remobilized to the Site where approximately 4,000 gallons and 9,950 gallons of storm water were discharged into the on-site storm water drainage and sanitary sewer system respectively. The storm water in the Drum Pad, the North Pad Sump and the on-site Storm Water Ditch areas was discharged into the on-site storm water drainage system. The pooled water in the New Tank Farm secondary containment and the Bulk Truck Loading Pad areas was discharged into the on-site sanitary sewer system for further treatment by the city. Several bench scale studies were also conducted to determine the best way to treat the water in the Old Tank Farm secondary containment area. When the proper ph was achieved and a zinc precipitate was visual, another storm water sample was collected and shipped to the off-site laboratory for industrial wastewater discharge

parameters. The Site was secured and personnel demobilized from the Site on January 31, 2008, and February 1, 2008.

From April 1 through 4, 2008, EPA and its two contractors remobilized to the Site to continue with stabilization activities that included transferring contents from deteriorating drums into plastic tote tanks, over-packing of drums that exhibited signs of poor integrity, and replacing poor or broken plastic bungs. During this mobilization the following drum contents were transferred and secured into plastic tote tanks for storage: 13 drums totaling 465 gallons of Bromoanisole, 7 drums totaling 150 gallons of bromotoluene, 5 drums totaling 275 gallons of bromofluorobenzene and 1 drum of 30 gallons of bromofluorobenzene crude. Also during this mobilization the following drums were placed and secured into over pack drums for storage: 10 drums of dibromobenzene sludge, 2 drums of bromofluorobenzene, 1 drum of bromotoluene mix, 1 drum of Bromotoluene, and 1 drum of bromobenzene pot bottoms. In addition, storm water that accumulated from recent rainfall events was pumped into the storm water drainage system. Storm water from the Old and New Tank Farm secondary containment areas, Process Area, and Warehouse was screened for pH and pumped into the sanitary sewer. The Site was secured on April 4, 2008, and personnel demobilized on April 5, 2008.

From May 27, through 29, 2008, EPA and its two contractors remobilized to the Site to continue with stabilization activities that included inspecting all containers, and the securing or replacement of poor or broken plastic bungs. Absorbent material used to construct the containment area around the dibromobenzene sludge drums stored in the warehouse was saturated with rain water and therefore was drummed and replaced with fresh absorbent material. Storm water that accumulated from recent rainfall events in the Old Tank Farm, New Tank Farm, Process Building, Forklift Path, and Bulk Truck Loading Pad areas was screened for pH and pumped into the sanitary sewer. Storm water that accumulated in the Drum Pad containment area was pumped into the storm water drainage system. Approximately 56 broken plastic drum bungs were replaced with new bungs. The Site was secured on May 29, 2008, and personnel demobilized on May 30, 2008.

From July 22 through 25, 2008, EPA and its two contractors remobilized to the Site to continue with stabilization activities that included inspecting all containers, and the securing or replacement of poor or broken plastic bungs. On July 25, 2008, materials (DBFB/Dibromotoluene Mix and m-Bromofluorobenzene technical) from eight collapsed drums were transferred and secured into plastic tote tanks for storage. In addition, one drum, contents unknown, was placed in an over pack drum, which was then placed in the warehouse for temporary storage. Storm Water had not accumulated in the Old Tank Farm due to the lack of rain. The debris inside the Old Tank Farm secondary containment area was cleaned out and placed in a 55 gallon plastic lined steel drum. Approximately 103 broken plastic drum bungs were replaced with new bungs. The Site was secured on July 25, 2008, and personnel demobilized on July 25 and 26, 2008.

2. Current Actions

There are no local governments or private clean up activities currently being performed at the Site.

C. State and Local Authorities' Roles

1. State and local actions to date

By the letter dated September 12, 2007, ADEQ referred the Site to the EPA Region 6 Superfund Division and requested an initiation of a response action by the EPA.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

A. Threats to Public Health or Welfare

The current conditions at the Site meet the following factors, which indicate that the Site is a threat to the public health, welfare and the environment and a removal action is appropriate under 40 CFR Section 300.415(b)(2) of the National Contingency Plan (NCP). Any or all of these factors may be present at a Site, yet any one of these factors may determine the appropriateness of a removal action.

1. Actual or Potential Exposure of Human Populations, Animals or the Food Chain to Hazardous Substances, Pollutants or Contaminants, NCP Section 300.415 (b) (2) (i)

There is potential for exposure of human population and animals to the hazardous substances found in the on-site 2,600 containers. The Site is located in a rural, industrial area that has three adjacent active businesses within one quarter of a mile and numerous residential homes within several miles of the Site. Routes of exposure include inhalation, dermal, and /or ocular absorption.

Vapor exposure from many of the bromine containing chemicals maybe fatal if inhaled, corrosive to the skin and eyes, and causes severe respiratory tract, nose and throat irritation. Direct contact may result in eye and skin burns that are slow to heal. Vapor exposure may also cause inflammation of the eyes, coughing, nosebleed, vertigo, headache and possible delayed abdominal pain, nausea, and diarrhea.

2. Contamination of Drinking Water Supplies or Sensitive Ecosystems, NCP Section 300.415 (b) (2) (ii)

If a fire were to occur at the Site all surface water run off would enter the above ground storm sewer system and eventually flow off-site to the adjacent farm land and eventually enter

the Mississippi River.

3. Hazardous Substance in Drums or Tanks, NCP Section 300.415 (b) (2) (iii)

As previously noted, the Site contains approximately 2,600 containers of varying sizes (from 5 gallon pals to 550 gallon plastic totes), 8 above ground storage tanks, and 7railroad tank cars of which a majority of them have contents. Many of the containers have poor integrity, or are not sealed, or are damaged and are steadily deteriorating.

4. Weather Conditions that May Cause the Release or Migration of Hazardous Substances, NCP Section 300.415(b) (2) (v)

East Arkansas is subject to several types of extreme weather conditions, which may cause a potential release of chemicals/materials at or from the Site. For example, high winds, a tornado and/or heavy rain fall event(s) could cause a potential release of chemicals/materials from the above ground secondary containments, drums, totes, and small containers and the off-site migration of their contaminants.

5. Threats of Fire or Explosion, NCP Section 300.415(b) (2) (VI)

Drums have potentially been staged with no apparent consideration for compatibility. The combination of incompatible materials such as acids and bases could result in exothermic reactions, which in turn could result in a fire and explosion. The resulting fire and associated vapors could potentially severely impact the three adjacent active business employees and populations, cause an evacuation and threaten their health and welfare. For example, bromine under fire conditions may release toxic and irritating fumes. Containers under fire conditions may explode and spread the fire. In fire situations, bromine releases hydrogen bromide, which is toxic and highly corrosive, especially in the presence of moisture.

6. Availability of Other Mechanisms, NCP Section 300.415(b) (2) (vii)

ADEQ has requested EPA assistance because existing State resources will not ensure a timely response action.

B. Threats to the Environment

The environment is primarily impacted by the drums and containers that are currently stored at the Site. If the local fire department had to put out a fire at the Site, all surface water run off would enter the storm sewer system and eventually enter the Mississippi River. The EPA is not aware of any sensitive animal populations or habitats in the area which could be affected by the Site.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances, pollutants or contaminants from this Site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to the public health, welfare, or the environment.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

A. Proposed Actions

1. Proposed action description

This initial emergency phase consisted of stabilizing the Site by inspecting and securing all containers, the transferring of any leaking and/or containers in deteriorated condition to better condition containers, the sampling of pooled storm water for fixed off site laboratory analysis and the proper disposal of the pooled storm water.

2. Contribution to remedial performance

The Site is not currently on the NPL and it is not expected to be proposed for inclusion on the NPL.

3. Description of alternative technologies

There are no alternative technologies which could be feasible applied.

4. Applicable or Relevant and Appropriate Requirements

This removal action will be conducted to eliminate the actual or potential releases of hazardous substances, pollutants, or contaminants into the environment, pursuant to CERCLA, 42 U.S.C. Section 9601 et. seq., and in a manner consistent with the NCP, 40 C.F.R. Section 300, as required at 33 U.S.C. Section 1321(c)(2) and 42 U.S.C. Section 9605. As per 40 CFR Section 300.415(j), fund-financed removal actions under CERCLA Section 104 and removal actions pursuant to CERCLA Section 106 shall, to the extent practical considering the exigencies of the situation, attain the Applicable or Relevant and Appropriate Requirements (ARARs) under federal environmental or state environmental laws.

5. Project schedule

The EPA responded to the Site on January 8, 2008, after ADEQ requested EPA response assistance and the EPA had completed a Site Assessment.

B. Estimated Costs

Extramural Costs

EPA ERRS Clean up Contractor.....$115,000

EPA START Technical Contractor .....$ 35,000

Total, Extramural Costs.....$150,000

Removal Costs Contingency (10%).....$ 15,000

TOTAL REMOVAL PROJECT CEILING.....$165,000

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

If no actions had been taken at the Site, the drums and containers would have continued to deteriorate and potentially release hazardous substances into the environment. The combination of incompatible materials mixing together could result in an exothermic reaction, which in turn could result in a fire and/or explosion. If this were to occur, contaminated water from fire fighting efforts would be carried off by run off, and enter the storm sewer system. If a fire and/or explosion were to occur at the Site, near by businesses and residences would more than likely have to be evacuated due to the resulting hazardous smoke plume.

VII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues associated with this Site.

VIII. ENFORCEMENT

See Enforcement Confidential Attachment 4.

The totals for this removal action based on full-cost accounting practices that will be eligible for cost recovery are estimated to be $312,850.

(Direct Cost) + (Indirect Cost) = Estimated EPA Costs for a Removal Action

($165,000 + $40,000) + (52.61% x $205,000) = $312,850

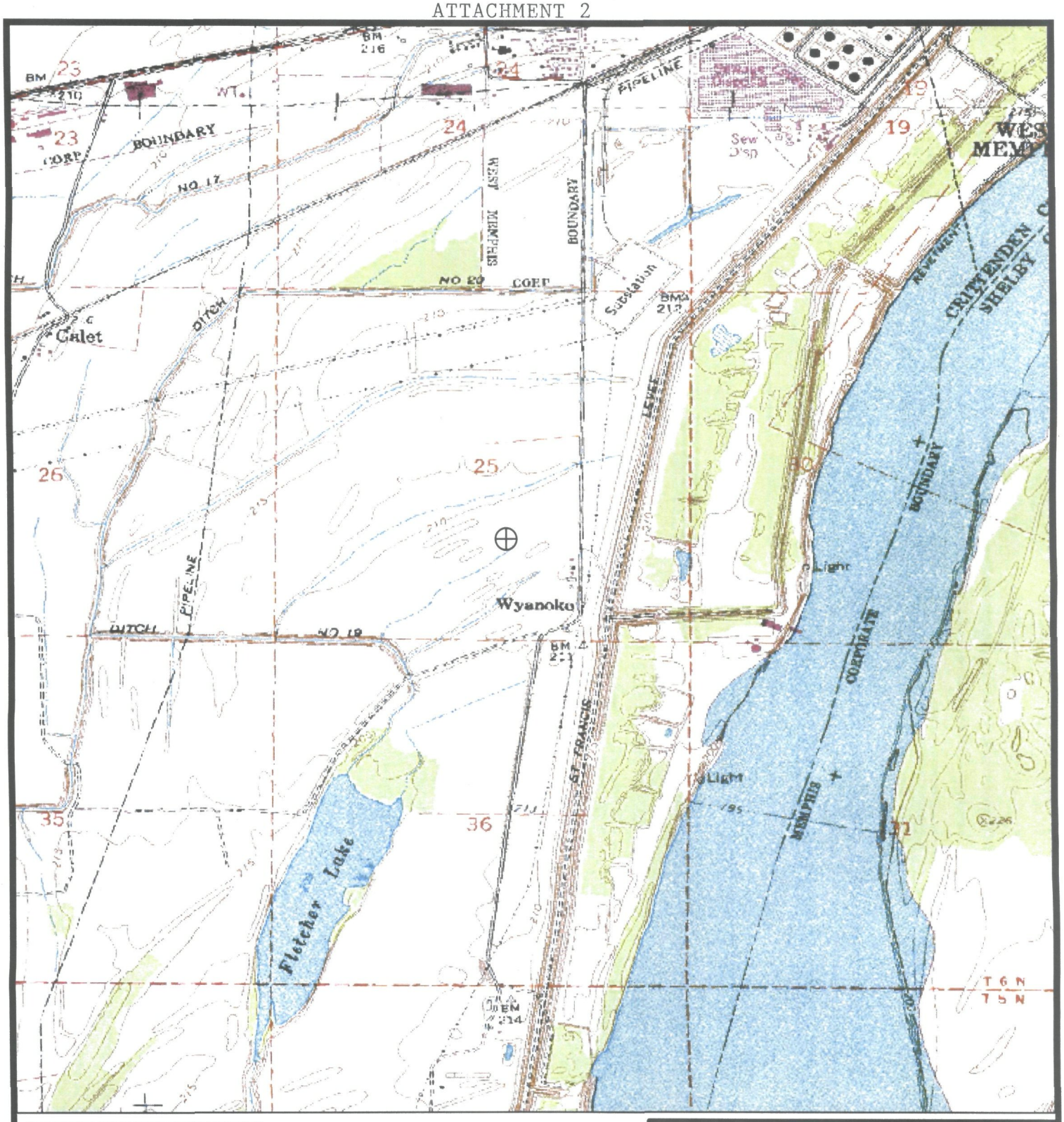
Direct costs include direct extramural costs and direct intramural costs. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of Site specific direct costs, consistent with the full cost accounting methodology effective October 2, 2000. These estimates do not include prejudgment interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a removal action. The estimates are for illustrative purposes only and their use is not intended to create any rights for responsible parties. Neither the lack of a total cost estimate nor deviation of actual total costs from this estimate will affect the United States right to cost recovery.

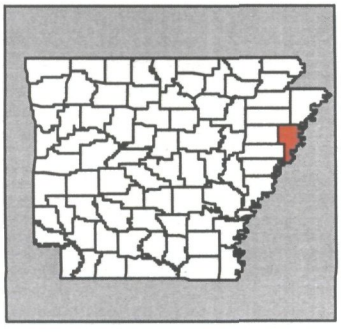
IX. RECOMMENDATION

This decision document represents the selected Classical Emergency Removal Action for the Diaz Intermediates Corporation Site located at 301Wyanoke Road, City of West Memphis, Crittenden County, Arkansas developed in accordance with CERCLA as amended, and not inconsistent with the NCP, 40 CFR Part 300. This decision is based on the administrative record for the Site.

Conditions at the Site meet the criteria for a removal, as defined by 40 CFR Section 300.415 (b) (2) of the NCP. The total project ceiling will be $165,000. Of this, an estimated $115,000 comes from the regional removal allowance.

ATTACHMENT 2





DRG(1999) downloaded from USDA:NRCS Geospatial Data Gateway

Legend

⊕ Site Location

N

0 1,000 2,000 4,000 6,000 Feet

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DIAZ INTERMEDIATES CORP. SITE AREA MAP

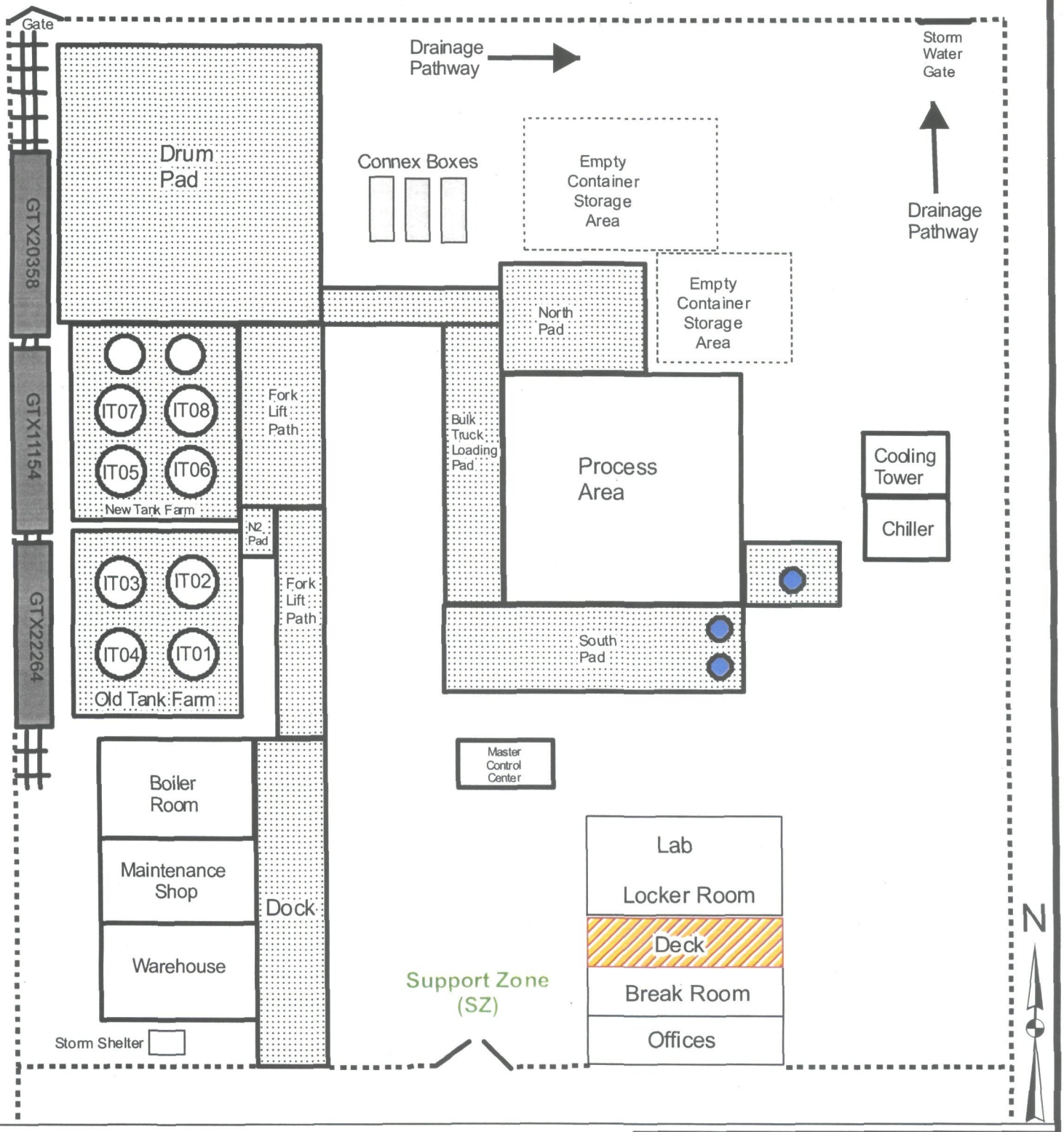
WEST MEMPHIS, CRITTENDEN COUNTY, ARKANSAS

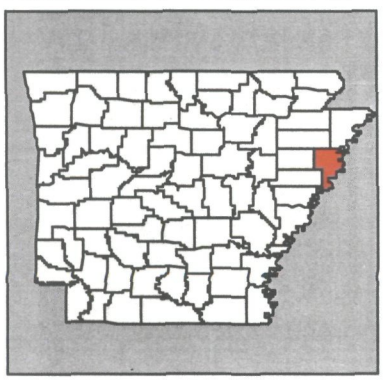
DYNAMAC CORPORATION

Drawn:	JTT/AV9.2
Date:	12/9/07
Dwg. No.:	DI-XX

FIGURE 2

TDD#: TO-0002-07-10-01, Dynamac WA#: S102-B06, CERCLIS No. ARR000005843





Legend

- Reactor Vessel
- Railroad
- Aboveground Storage Tank
- Fence
- Concrete
- Railroad Tank Car (GTX2264)

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DIAZ INTERMEDIATES CORP. SITE PLAN

WEST MEMPHIS, CRITTENDEN COUNTY, ARKANSAS

DYNAMAC CORPORATION

Drawn:	JTT/AV9.2
Date:	12/9/07
Dwg. No.:	DI-XX

FIGURE 5

TDD#: TO-0002-07-10-01, Dynamac WA#: S102-B06, CERCLIS No. ARR000005843

MEMORANDUM

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West Memphis, Crittenden County, Arkansas

FROM: Charles W. Fisher, (OSC/RPM)
On-Scene Coordinator/Remedial Project Manager
Remedial Branch, Arkansas/Texas Team (6SF-RA)

THRU: Ragan Broyles, Associate Director
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Category of Removal:	Classic Emergency
Site ID Number:	A6C4
Latitude:	34.518083 North
Longitude:	90.648433 West

Webster 6SF-PR

Broyles/Peterson 6SF-P 11/21/08